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An extension of the benefit segmentation base for the consumption of organic foods: A time perspective

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Abstract Benefit segmentation is a long-standing marketing approach that emphasises the 'what' and 'how' dimensions of consumer benefits; that is, *what* benefits consumers perceive in product/service consumption, and *how* such benefits are perceived. This research proposes a fresh time-based approach to benefit segmentation – namely, focusing on the 'when' element or *when* in time benefits take effect. Drawing upon a survey of UK consumers, it explains and discusses consumption motivations through examining antecedents of temporally dominated benefits in application to organic food. Specifically, the study investigates why some consumers predominantly seek present-based benefits vis-à-vis future-based benefits or vice versa in organic food purchase and consumption behaviour. Using correlation and regression analyses, the research findings establish significant associations of level of involvement, prior knowledge level, and product usage level, and some association of time orientation with the temporally emphasised consumption benefits consumers ultimately pursue. Overall, the research highlights the added contribution of a time perspective in a benefit segmentation approach which can assist marketers in understanding better and communicating more effectively with consumers through drawing up consumer profiles based on when in time their dominantly pursued benefit for an offering is perceived to take effect.

Keywords time perspective; benefit segmentation; organic food; consumption motivations

Introduction

The use of benefit segmentation as a viable marketing segmentation strategy emphasises the importance of categorising and targeting consumers based on benefits pursued in consumption and purchase. In an appreciation of the importance of benefits in marketing, Haley (1968) pioneered benefits segmentation as an overriding and efficient approach to identifying homogeneous groups of consumers in target marketing. Such an approach relies on factors which are not just descriptive but also have a causal relationship to consumer's future purchase behaviour. Haley's (1968, 1984) conceptual studies in this domain support benefits segmentation as an effective

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and prime method through indicating that benefits determine consumer behaviour more accurately than demographic characteristics or volume of consumption.

Market segmentation on the basis of benefits relies on measuring consumer value systems as well as what the consumer thinks about the product category. However, despite being efficient, the approach of benefit segmentation has not explicitly identified bases on which benefits are classified. This might be attributable to how literature focuses on categorising benefits by what they offer consumers, be that functional gains, emotional gains, social gains, and so on, without explicitly acknowledging other possible dimensions of perceived benefits. For instance, while studies based on such a benefit categorisation can provide useful insights in terms of *what* the gain is to a consumer and *how* the consumer perceives such a gain, the temporal dimension of such benefits, that is, *when in time* such gains take effect, is another focal perspective worth investigating. Haley's (1968) benefit segmentation proposition relies on the notion that although consumers may enjoy all benefits, the relative importance they attach to individual benefits may be essentially different and positing different appeals across consumer groups. However, the literature does not explicitly indicate a particular benefit classification attached to such a segmentation approach. Thus, the implicit grouping of benefits intended may mostly rely on the standard classification on the basis of the 'what and how' perspective, still arbitrarily ignoring the dimension of time of occurrence.

Time, a ubiquitous concept in the mental and psychological realms of individuals, plays an important role in consumer motivations and actions. Nonetheless, it has more often than not been positioned as a side variable in consumer studies, implicitly addressed or completely neglected (Bergadaà, 1990). This is supported by other studies that call attention to the shortage of in-depth studies of consumer–temporal influences such as the effect of time on consumer decisions, factors affecting decision time, and time within consumer decision processes (Gibbs, 1998; Gronmo, 1989; Jacoby, Szybillo, & Berning, 1976). Mowen and Mowen (1991) suggest that time-linked benefits are critical consumer motivations and should receive more in-depth study, emphasising that 'time systematically influences how individuals value the worth of losses and gains' (p. 55). Accordingly, a literature review suggests that a temporal understanding of benefits remains limited and calling for more study. Simons, Vansteenkiste, Lens, and Lacante (2004), seconded by Crockett, Weinman, Hankins, and Marteau (2009), explain how, in making decisions, individuals are inclined to be driven by present or future goals reflecting present or future time orientation.

Accordingly, the current research aims to support the importance of studying time in consumer research by investigating the notion of a time-linked or, in other words, a *temporally emphasised*, *benefit orientation* for its relationship and influence in consumer decision making. The objective of the study is to use a multi-attribute model of consumer-related attributes constituting psychographic, social, behavioural, and demographic factors investigated for their significance as possible antecedents of why some consumers are more likely to seek longer-term benefits versus shorter-term benefits, while other consumers have opposite motivations. This is undertaken in application to the product category of organic food – a continually growing trend, despite the economic downturn. A premise of such an approach for categorising benefits sought, namely by time or temporal orientation, is that such a way of discriminating among benefits is in some way systematically related to a more varied and realistic modelling of consumer behaviour towards organic food based on purchase motivations.

Within the context of the current research, a *temporally emphasised benefit orientation* signifies an overarching time dominance in consumers' pursuits of a product's benefits, depending on when in time these benefits ensue for the consumer. Such temporally emphasised or time-based benefits can be expressed as either *present-based* (short term) or *future-based* (long term); present-based benefits can be defined as those gains that occur without delay, providing immediate fulfilment up to and through final product consumption. On the other hand, future-based benefits are those gains providing fulfilment in the distant future, beyond the end of product consumption.

Temporally emphasised benefit orientation is a notion supported by Strathman, Gleicher, Boninger, and Edwards (1994) who proposed a construct of 'consideration of future consequences' for measurement, where they postulated that there are consistent individual differences in the degree to which individuals are likely to contemplate distant outcomes in selecting present action; as such, some individuals find future outcomes more worthwhile even if they have undesirable present costs, whereas others are more likely to attempt to maximise present gains as being a priority and of higher interest to them. Yet, aside from just two studies taking this notion forward by linking aspects of consumer behaviour to consideration of future consequences – namely, Wang, Dacko, and Gad Mohsen's (2008) study addressing the importance of perceived benefits and costs in consumer decisions to adopt a really new service along varying temporal distance, and Liberman and Trope's (1998) construal level theory (CLT) of the influence of temporal distance from a future action on the salience of benefit and cost considerations – the antecedents of individuals' likelihoods in pursuing time-based benefits associated with particular consumption and purchase behaviours are, surprisingly, not empirically investigated in the extant literature.

Accordingly, by proposing and evaluating a multi-attribute model of factors that may have a significant role in the temporal emphasis of consumer benefit pursuit (detailed subsequently in Figure 1), the present study examines the association between each of level of product category involvement, prior product knowledge, time orientation, level of product usage, income level and level of education, and temporally emphasised benefits sought. Such an investigation can assist in drawing up profiles of consumers using a time-based benefit-segmentation approach. The rationale for the examination of these factors is twofold; first, with the exception of time orientation, these factors are explored in existing marketing studies as characteristics in relation to benefits of products/services, as detailed in the research conceptual development. Second, some organic food studies link these factors with characteristics of organic food buyers and with motivations for its consumption and/or adoption.

In the next sections, we briefly highlight background literature related to time in consumer research, benefit segmentation and organic food. Subsequently, a conceptual framework of the research variables is presented through hypotheses advanced for empirical investigation.

Benefit-based segmentation and the notion of time in consumer research

Changing consumer markets in terms of highly competitive industries and shifting consumer trends call for enhanced market segmentation that better

corresponds to consumer's needs and behavioural patterns. In support of this, Hollywood, Armstrong, and Durkin (2007) emphasise that conventional segmentation approaches such as geographic and demographic segmentation are not likely to assist food marketers in grasping how consumers behave in reality. This is backed by Smith's (2004) view that market segmentation that does not focus on consumer motivations 'is simply an approximation based on the assumption that descriptors (i.e. characteristics) and motivations (i.e. needs/behaviour) are closely aligned – usually they are not' (p. 27).

Recognising the notion that consumers will not waste time and money purchasing a product unless utility is gained from the activity (Feldman & Hornik, 1981) accentuates how perceived benefits drive behaviour. As long established by Day (1990), 'a comprehensive understanding of possible benefits that customers may seek is a fundamental basis for marketers to formulate sound marketing strategies, specifically product differentiation or positioning' (p. 103). Thus, in studying perceived benefits as motivations for consumer behaviour, researchers classified product benefits into various categories, including functional, hedonic, social, epistemic, and aesthetic, among others (Lai, 1995; Sheth, Newman, & Gross, 1991).

In proposing a conceptual modelling of product valuation, Lai's (1995) calls for addressing the missing 'how' aspect of benefits in consumer studies, where this aspect describes the way consumers perceive a product's benefits. These consumer perceptions may be based on the level of importance of the benefits to self/significant others, subjective preferences for and judgement of certain types of benefits vis-à-vis others, and/or the timing of benefits – or, in other words, *when* in time benefits actually take effect, linking time and pursued benefits.

As recognised by Robinson and Nicosia (1991), 'The notion of time has been largely invisible in consumer research and not very central in most social sciences. Yet observation of social relationships and of individual choices indicates that time is an all pervasive referent' (p. 171). The evident under-researched attention to studying the notion of time and temporality in relation to consumers may be attributed to the difficulties associated with measuring time as a variable; that is, gauging time is viewed by some researchers as methodologically challenging (Davies, 1994; Halinen & Tornroos, 1995; Jacoby et al., 1976) given the difficulty of encapsulating its various dimensions, such as time points, intervals, duration, structure, extension, use patterns, allocation, perception, emphasis, and orientation, among others.

Nonetheless, the concept of time can be anchored in consumer behaviour from varied perspectives. Over time, there have been growing – albeit extendable – attempts at emphasising and appreciating the role of time in consumer behaviour (Bergadaà, 1990; Ferrandi, Valette-Florence, Prime, & Usunier, 2000; Ko & Gentry, 1991). Examples include studies of time perspective and recreation experience preferences (Cotte & Ratneshwar, 2003; Shores & Scott, 2007); the application of CLT in the prediction, evaluation, and choice of preferences and outcomes (Trope & Liberman, 2000, 2003); the pros and cons of temporally near and distant actions (Eyal, Liberman, Trope, & Walther, 2004); and, more recently, a study of consumer sensitivity to the likely duration of their decisions and the implications of such sensitivity for inter-temporal trade-offs (Zauberman, Kim, Malkoc, & Bettman, 2009).

Yet, existing studies have not explored in depth a time perspective in cataloguing consumer gains in product consumption and purchase, thus undermining the time element fundamentally anchored within perceived benefits perceived and sought

by consumers. Studying the temporal emphasis of benefits and its impact on consumer behaviour can instigate fresh insights into a segmentation of consumers with respect to inter-temporal motivations. In relation to food marketing, despite the use of value-based segmentation by some research to express how personal values might explain consumer behaviour towards quality foods (Fotopoulos, Krystallis, & Anastasios, 2011; Krystallis, Vassallo, Chryssohoidis, & Perrea, 2008), it is a psychographic segmentation that does not incorporate motivations in understanding and categorising consumers. Therefore, developing more tailored motivation-based segmentation approaches, such as an enhancement on benefit segmentation that incorporates its temporal dimension for a better understanding of consumers becomes valuable in order for marketers to grasp the nature of the consumer decision process and reveal what consumers are seeking to attain through the acquisition of a product.

Organic food product category as an application vehicle

Organic food consumption represents part of the move towards sustainable consumption where products and services are used and consumed to offer solutions and a better quality of life without burdening the environment, overusing natural resources, or jeopardising future generations (Abeliotis, Koniari, & Sardianou, 2010). In simple terms, food considered organic is any and all natural foodstuffs that are free of artificial chemical fertilisers, herbicides and pesticides, antibiotics, and genetically modified organisms. In addition, it is food that has not been subjected to irradiation. The United Kingdom Register of Organic Food Standards (UKROFS) defines organic production systems through which organic produce is obtained as 'being designed to produce optimum quantities of food of high nutritional quality by using management practices which aim to avoid the use of agrochemical inputs and which minimise damage to the environment and wildlife' (Jones et al., 2001, p. 359).

According to the Food and Agricultural Organisation of the United Nations (FAO), organic food refers to 'food produced through a process characterised by mandatory 'soil building' crop rotations and absence of synthetic inputs' (Giannakas, 2002, p. 2). In a more recent study of nutritional quality and safety of organic food, Lairon (2010) states that 'respect for the environment and animals, promotion of sustainable cropping methods, use of non-chemical fertilizers and pest/disease/weed control means, production of high-quality foodstuffs, and no use of genetically modified (GM) crops' (p. 34) are the key features of the organic agriculture production systems.

Yet, moving beyond these relatively technical definitions, marketers and consumer behaviour researchers continue to seek a discovery of how the consumer views organic food not as a category or notion, but in terms of its specific consumption drivers. A challenge, however, is that existing consumer behavioural and marketing models may not always be sufficient in permitting such an understanding. This view is supported by Essoussi and Zahaf (2008) who advocate that:

> the traditional marketing approach and specifically consumer marketing theory are not sufficiently prepared to handle the advent of new types of consumer such as organic food (OF) consumers. These consumers are looking for more than a product, i.e. they are looking for different added values linked to the product. (p. 95)

This is seconded by the view of Alex Beckett, a Senior Food Analyst, as reported by Mintel (2011), that the organic market has to 'engage with people's emotions rather than their vague ideas about whether pesticides are harmful or not, by clearly communicating tangible benefits'.

Such marketing challenges in understanding and engaging with specific types of consumers comes at a time when food marketing in general has emerged as a highly critical domain given its reliance on unpredictable consumers who are becoming more informed and educated, and thus increasingly demanding (Bergadaà & Del Bucchia, 2006). Also, as stated by Beaudreault (2009), 'while consumers stroll down grocery aisles with lists in hand, new products bombard the shelves daily creating an array of choices for them' (p. 379). General developments in food demand indicate that growing health consciousness and concerns for well-being are becoming a predominant theme driving a tendency to seek safer, higher quality, and more ecologically sensitive foods (Vindigni, Janssen, & Jager, 2002; Wier & Calverley, 2002). This is also backed by recently increasing studies highlighting growing consumer preferences for green or sustainable products (Bonini & Oppenheim, 2008).

As food safety and security combine with awareness of environmental protection and individual well-being, governments and the public alike put greater emphasis on food, nutrition, and health, as well as on the best means for present and future food security (Lairon, 2010). Such a trend is escalated by changes in the food industry over the past decade due to challenges facing producers and marketers in the face of mounting food scares and rising apprehension about health hazards, including 'the public health, environmental and moral risks involved with chemical-based crop production and intensified livestock management' (Guthman, 2003, p. 46), as also supported by Beaudreault (2009) and Lairon (2010). These problems notably contribute to changing consumption patterns and varying consumer attitudes towards food-safety concerns, which are critically important for marketers to probe and understand, together with issues of consumer trust (Michaelidou & Hassan, 2008).

Being a growing development strategy rather than simply a label, organic food potentially provides answers to many of the current food-sector issues such as concerns over genetically modified foods, the food-safety shock caused by the deadly outbreak of *Escherichia coli* O157:H7 in 2006 linked to a US spinach harvest, the use of chemical pesticides and insecticides, as well as growing environmental dilemmas and fears for animal welfare. Investigating the controversial nurturing of genetically modified foods, Newman (2009) postulates that 'while the technology holds clear benefits to agribusiness, few compelling benefits to the general public have been demonstrated . . . there are some real liabilities. This creates a dilemma for the industry and its supporters' (p. 25). In that study of genetically modified foods and the attack on nature, Newman (2009) also indicates that 'the extent to which technologically untransformed nature represents a positive value is open to question, as is the point in any practice at which the natural and the artifactual become inextricable" (p. 26). It thus brings the value of organic food to light, elucidating that whether or not organic food holds health and environmental advantages is essentially a matter of the consumers' right to know what they consume.

Organic food in the context of this research constitutes organic fresh produce (fruits and vegetables), organic processed foods, and any and all other organic foods such as organic meat, eggs, biscuits, herbs, and others available in the marketplace.

Along these lines, investigating temporal motivations in the consumption of organic food as a product category in this research has several important foundations. First, the benefits of organic food are recurrently communicated in the literature and in the news, such as nutritional value and taste, where these can be temporally classified in the present research in terms of the relative short-term or long-term time of their occurrence, as detailed later, which is also backed in this research by a preliminary exploratory study conducted in the UK. Second, the global organic food market has recently grown in total sales by nearly 5% to $54.7 billion, as estimated by the Research Institute of Organic Agriculture (FiBL) and the International Federation of Agricultural Movements (IFOAM; Willer, 2011), with much of its popularity emanating from increased consumer knowledge and perceptions of its value and association with sustainable food systems vis-à-vis mass-produced conventional food. Third, despite various efforts in organic food research to reveal the characteristics of 'the organic consumer', empirical results have so far been scattered and inconclusive at best and contradictory at worst (Chinnici, D'Amico, & Pecorino, 2002; O'Donovan & McCarthy, 2002; Wilkins & Hillers, 1994).

Further, one of the main controversies surrounding organic food involves the need for a clearer understanding of consumer perceptions of benefits and added value pursued in its consumption, whether ecological, social, or health related. According to Beaudreault (2009), 'Many researchers in the private and public sectors are now conducting studies on the buying habits and demographics of consumers of organic foods, according to the USDA, and most have produced varied data. Depending on the type of survey, sample size, and geographic coverage, results have reached different conclusions' (p. 381), highlighting the ongoing controversies, despite some general agreement as to a number of benefits that may be gained from eating organic.

Latacz-Lohmann and Foster (1997) emphasise that the only means by which organic food can portray a 'special and distinct' identity that will encourage consumers to purchase it relative to conventional food lies in communicating organic food properly to the consumer, in terms of appropriate presentation and promotion. Thus, organic food marketers interested in communicating with consumers and knowing how best to segment the market target specific consumer groups and position themselves to serve various segments best have been hindered by the continuing debate. This includes who is the organic consumer, and is it a homogenous group that shares the same characteristics, motivations, and needs equally, or are there differing segments within? How does such a consumer define the organic notion? What does s/he specifically look for in eating organic? How can benefits and value in organic food consumption and adoption be highlighted and consumer concerns alleviated? Firmer answers to these research questions can guide marketing strategists and communicators in designing tailored marketing programmes and marketing communication messages targeting the 'right' consumer segments with the right information. The present research contributes to finding some answers by investigating what consumers are looking for in eating organic, and classifying their primary motivations utilising a time-based benefit-segmentation approach, where antecedent consumer-related attributes assist in drawing up differentiated and targetable consumer profiles of present-based benefit seekers and future-based benefit seekers. A discussion of organic food consumption benefits follows.

Organic food perceived benefits

Despite controversies and debates about its relative characteristics and real value, both individual consumers and consumer groups are prompted to pursue and react to market opportunities for safer food with high levels of enthusiasm (Wilson, Evans, Leppard, & Syrette, 2004). In the face of the financial crisis and the global economic downturn, the global organic food industry is reported to be still growing, even if at slower rates, due to committed customers (Hunt & Dorfman, 2009; Nield, 2009; Willer, 2011). Such estimates further support the view that the organic food sector is recognised globally as the fastest-growing sector of the food industry (Essoussi & Zahaf, 2008; Sahota, 2007). In the UK, Mintel (2011) reports that the organic market is gradually recovering from a sales decline of 12.3% in 2009, 6.5% in 2010, to 2% in 2011. It also reports that the retail sales value of organic food in the UK increased by 0.3% to £1288 million (€1545 million) between 2006 and 2011, forecasting the organic food market to be worth £1547 million (€1855 million) by 2016, up by 20% from 2011.

As matters of social responsibility become of more concern to consumers, there tends to be higher demand for products that can satisfy immediate needs and that may also have ethical dimensions (Follows & Jobber, 2000). A comprehension of which benefits, that is, the short-term or the longer-term benefits, are the predominant motivations for different consumers in purchase or consumption requires empirical study, as undertaken in the current research. Studies of organic food suggest a number of benefits in its purchase and consumption, including better health, superior taste, environmental welfare, a higher nutritional value, curiosity satisfaction, animal well-being, and safer food (Davies, Titterington, & Cochrane, 1995; Hill & Lynchehaun, 2002; Wier & Calverley, 2002; Zanoli & Naspetti, 2002).

Guided by the earlier-defined *temporally emphasised benefit orientation*, perceived benefits of organic food can thus be classified into *present-based (short-term) benefits*, that is, superior taste (Davies et al., 1995; Lea & Worsley, 2005; Zanoli & Naspetti, 2002) and satisfaction of curiosity about organic food (Hill & Lynchehaun, 2002), and *future-based (long-term) benefits*, namely improved health, environmental welfare, higher long-term nutritional value, improved animal well-being, and safer food (Davies et al., 1995; Hutchins & Greenhalgh, 1997; Squires, Juric, & Cornwell, 2001). The literature on medical health decision making supports the classification of taste as providing immediate pleasure consequences, whereas good health represents a future outcome, as suggested by Chapman and Elstein (1995) in studying valuing the future through temporal discounting of health versus money, and also as postulated by Crockett et al. (2009) in highlighting that 'health behaviour is characterised by immediate effort for possible future gain' (p. 333).

Consumer preference and motivation for seeking benefits within one temporal-based benefits' category versus the other reflect the view, for example, that some people may find little value in far future benefits, whereas others find them to be superior to any short-term gains accrued in consumption. The research poses a conceptual framework for examining the extent of influence of certain psychographic, social, behavioural, and demographic attributes on consumer preferences for organic food benefits through the hypotheses proposed. Specifically, theoretical support for exploring the effects of level of product involvement, perceived prior knowledge of the product, product usage level, individual time orientation, income level, and level of education is presented next.

Research conceptual framework

Level of involvement and temporally emphasised benefit orientation

First, consumers' *level of involvement*, defined in terms of enduring interest in and general concern with a product category, may stimulate information search (Mittal, 1989) and thus affect choice behaviour in consumption decisions. In the organic food literature, it is one of the motives for its consumption (Davies et al., 1995; Zanoli & Naspetti, 2002), since organic food as a trend involves a learning experience that links to varying levels of interest and involvement (Heslop, 2006). Research has also recognised 'interest in health' as a key motive in the purchase of organic food (Grankvist & Biel, 2001; Lockie, Lyons, Lawrence, & Mummery, 2002; Michaelidou & Hassan, 2008). In addition, in terms of time, Bergadaà's (1990) research on the role of time in consumer perceptions demonstrates that individuals who have 'a principal attitude of action' and seek opportunities with higher levels of interest usually focus on future plans that are abstract and less concrete than individuals with lower levels of interest. On this basis, it is hypothesised:

H1: There is a significant relationship between level of product category involvement and temporally emphasised benefits sought, where a higher level of involvement is associated with a consumer's dominant pursuit of future-based benefits in organic food consumption.

Prior product knowledge and temporally emphasised benefit orientation

Prior product knowledge is proposed in consumer research as one of the cognitive traits existing at the background of consumer perceptions, influencing valuation of a product's perceived benefits, costs, and value (Lai, 1995). In organic food research, perceived prior knowledge exemplifies an important factor in the acceptance of organic food and may, therefore, determine the specific benefits consumers perceive and look for in it (Hill & Lynchehaun, 2002; Zanoli & Naspetti, 2002). Consumer product knowledge has two key components: familiarity and expertise (Alba & Hutchinson, 1987). Familiarity relates to the number of product-related experiences accumulated by the consumer, and expertise relates to past experiences that form a background affecting the present and/or the future.

From a temporal viewpoint, Bergadaà's (1990) study of the role of time in consumer action highlights that individuals with a future focus seek to 'enrich themselves intellectually' (p. 296), are characterised by a motivation to learn more in order to develop themselves, and usually have abstract plans. In addition, Agarwal, Tripathi, and Srivastava (1983) establish that individuals heavily concerned with setting distant future goals are contemplative and deliberate different options in making choices; such individuals act less spontaneously and mostly go for 'larger, delayed rewards' (p. 378). Applying this to consumer intentions in product/service consumption, it can be reasoned that as individuals build greater knowledge of products, such as organic food, they may be more concerned with and prefer its longer-term benefits to those they can immediately attain. As such, it is hypothesised:

H2: There is a significant relationship between level of prior product knowledge and temporally emphasised benefits sought, where a higher level of perceived prior

knowledge is associated with a consumer's dominant pursuit of future-based benefits in organic food consumption.

Level of product usage and temporally emphasised benefit orientation

Product usage level is a behavioural variable which can be gauged in the context of this research as the percentage of organic foods in the consumer's total monthly food purchases. Research shows that frequent users have more idealistic cognitive structures than occasional consumers, which may be considered as a symptom of a higher level of interest (Zanoli & Naspetti, 2002). From a learning perspective, heavy users may feel that they have developed non-transferable, product-specific knowledge and skills. Having invested time and energy to become competent at one product, such consumers may want to capitalise on the product-specific knowledge by further increasing the usage level of the product (Hoch & Deighton, 1989). It is therefore suggested that greater product usage is associated with anticipated benefits that will result from a build-up of gains over time, hence providing future fulfilment. Hence, it is hypothesised:

H3: There is a significant relationship between product usage level and temporally emphasised benefits sought, where a higher level of product usage is associated with a consumer's dominant pursuit of future-based benefits in organic food consumption.

Time orientation and temporally emphasised benefit orientation

Time orientation is defined by Nuttin (1985) as 'the preferential direction in a subject's behaviour and thought insofar as it is predominantly oriented towards objects and events in the past, present or future' (p. 11). Earlier research on individual time orientation points to its possible influence on shopping, consumption, and attitudes towards delayed gratification (Agarwal et al., 1983; Bergadaà, 1991; Feldman & Hornik, 1981; Settle, Alrech, & Glasheen, 1978; Usunier & Valette-Florence, 1995). Such studies illustrate how time orientation may ultimately have a critical, though inadequately understood, influence on human behaviour. This view is also shared by Shores and Scott (2007) in relating time orientation to recreation behaviour and desire for leisure benefits.

Further, Bergadaà (1990) argues that different individual temporal orientations may induce various motivations, plans, and consumption of different types of products. Consistently, Crockett et al. (2009, p. 334) point out how various studies relate present orientation with 'a limited sense of control, fatalism and preference for behaviours with immediate rewards (Rothspan & Read, 1996; Zimbardo & Boyd, 1999)'. Usunier and Valette-Florence (1995) uncover a number of dimensions of individual time patterns having a significant influence on consumer behaviour. Luszczynska, Gibbons, Piko, and Tekozel (2004) also associate future orientation with healthy eating behaviour as representing an immediate action towards a future gain. However, little is specifically and empirically known concerning the relationship between time orientation and benefits sought from the consumption of specific product categories and controversial market trends, such as organic food in particular. A conceptual link between time orientation and temporal-based benefits pursued is put forth for examination, where it hypothesised that:

H4: There is a significant relationship between time orientation and temporally emphasised benefits sought, where future time orientation is associated with a consumer's dominant pursuit of future-based benefits in organic food consumption.

Income level and temporally emphasised benefit orientation

Income level is a fundamental demographic factor incorporated in much consumer behaviour literature, where it has been studied in relation to search activity, time allocation, and knowledge acquisition, among many other areas. In relation to aspects of time, some earlier studies demonstrate that income is an important determinant of consumers' information search times (Jacoby et al., 1976; Stigler, 1961). Despite its rigorous inclusion in consumer research, however, extant studies have not examined income level in relation to the temporal facet of consumer benefits. In organic food literature, there is some – albeit mixed – evidence regarding the strength of the relationship between income level and organic food purchase tendencies, where some research indicates that consumers with higher incomes are less likely to purchase organic food (Thompson & Kidwell, 1998), while other research indicates that purchase tendency increases with level of disposable income (Davies et al., 1995). In other studies, it is articulated that income level may not influence willingness to buy per se but rather the quantity purchased in some cases (Krissoff, 1998; Lockie, Lyons, Lawrence, & Grice, 2004; Thompson, 1998). However, Goldman and Clancy (1991) establish that there is no significant association between income and level frequency of organic food purchase. In seeking to resolve such mixed findings, it is proposed for empirical investigation that consumers with varying income levels may systematically vary in pursuit of temporally emphasised organic food benefits. Accordingly, the following is hypothesised:

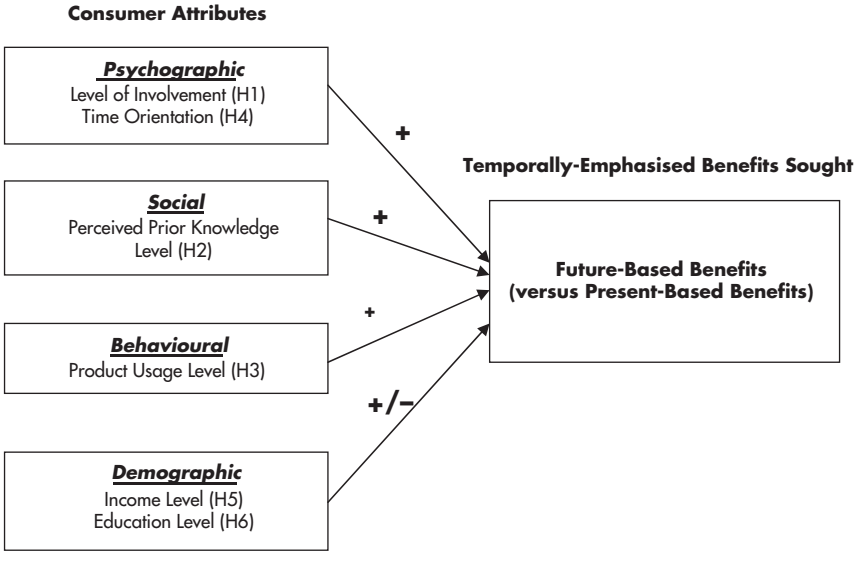
H5: Consumers at different income levels differ significantly in temporally emphasised benefits sought in the context of organic food consumption.

Level of education and temporally emphasised benefit orientation

Level of education has been studied in relation to consumption and temporality within many research domains. For example, social psychology research suggests a link between individuals' temporal orientations and some sociodemographic variables, including education level (Agarwal et al., 1983; Klineberg, 1967; Trommsdorff, 1983), where the latter may affect skills in undertaking different courses of action. Furthermore, Trommsdorff's (1983) study associates future orientation tendencies with education and the socialisation process. Level of education was also examined in relation to the temporal systems of individuals and how this relationship affects consumer behaviour (Bergadaà, 1990). Accordingly, from such literature, it is notable how much education level may potentially influence consumers' motivations, aspirations, and decision plans in the consumption of products/services.

Specifically for organic food offerings, basic information from exploratory interviews conducted with food marketers in the UK towards designing the present research suggest a possible association between consumers' levels of education and perceptions of organic food value. Moreover, some organic food research links

Figure 1 Proposed model of antecedents of temporally emphasised benefits sought in organic food consumption.



higher education to a lower tendency to purchase organic food (Byrne et al., 1992; Thompson & Kidwell, 1998), whereas in other studies, a higher level of education is associated with a willingness to pay high prices in consuming organic food (Canavari et al., 2002). Given these mixed indications, the current research investigates a possible systematic relationship between consumer level of education and temporally emphasised organic food benefits sought, where the direction of the relationship can be empirically established. Thus, it is hypothesised:

> *H6: Consumers at different levels of* education *differ significantly in temporally emphasised benefits sought in the context of organic food consumption.*

Figure 1 summarises the research conceptual development and key hypotheses, where the research methodology is detailed next.

Methodology

To test the research hypotheses, a survey of attitudes towards organic food and its purchase and consumption behaviour was developed and administered to consumers in the UK. The sample was selected using purposive or judgemental sampling (Patton, 2002), where the subjects were drawn from individuals visiting an organic farm in Warwickshire, UK. The farm is considered a visitor attraction and encompasses a café, a restaurant, and a shop selling its own organic products. People visit the farm for a variety of reasons, including spending a day with nature, enjoying a coffee/tea or a meal in the café/restaurant, buying a sample of organic food for first trial, or purchasing organic foods on a regular basis. Correspondingly, the population

there represents consumers in the UK at varying levels of organic food awareness, knowledge, purchase, and consumption, from which, hence, a target sample was accessed.

The sample is a mixture of rural and urban consumers, as it was drawn from residents and visitors in Warwickshire, UK, which has both urban and rural characteristics, but also where a significant part is rural, according to its county's description (warwickshire.gov.uk, 2011). As such, the survey was conducted with a sample of 350 respondents, resulting in 325 usable questionnaires. Respondents were encouraged to enjoy a free beverage at the farm's café while completing the survey, which contributed to the high response rate.

The dependent variable examined in this study is temporal-based benefits sought, and the independent variables are level of involvement, prior product knowledge, product usage level, time orientation, income level, and level of education. As shown in Table 1, all independent variables in the survey were operationalised using multi-item measures drawn from existing scales, except for product usage level, which was measured through an open-ended question requesting the percentage of organic food in the respondent's overall monthly food purchases. An involvement scale that reflects the interest dimension of involvement (adapted from Zaichkowsky, 1985, and Bloch, Sherrell, & Ridgeway, 1986) was used for level of involvement. A prior knowledge level scale reflecting the perceived level of familiarity and understanding of the product (adapted from Alba & Hutchinson, 1987) was utilised in measuring perceived level of prior knowledge. A time orientation scale that measures an individual's temporal perspectives in life (adapted from Bergadaà, 1991, and Usunier & Valette-Florence, 1995) was used for testing individual time orientation. To assess the reliability of the combined constructs, coefficient alpha was calculated for all variables, as presented next.

The dependent variable 'temporal-based benefits sought' was operationalised using a combined scale comprised of items representing present and future benefits of organic food (captured on a seven-point Likert scale). The scale was pretested through a preliminary exploratory study which was undertaken, and constituted two phases. The first phase involved visiting a prominent annual European organic food trade fair in Germany, where information was gathered to identify marketers' perspectives on issues raised in the research, in addition to setting some grounding for its operational design on consumers in the UK specifically. In the second phase, 10 semi-structured interviews were conducted with consumers shopping at organic outlets in the UK, as well as with some marketers at these outlets, with the objective of verifying organic food's perceived benefits derived from the existing literature carried out in different countries. This phase helped in determining whether there were benefits from secondary data that were not perceived by UK consumers, and whether there were additional benefits to include on the survey in the scale for temporal-based benefits sought as the dependent variable.

The scale was also examined for inter-item correlation and internal consistency reliability. These steps resulted in the removal of the item of 'satisfaction of curiosity', as it reduced the measure's overall reliability. Additionally, support for this elimination came from the results of the exploratory research that was used to build and support the survey questions. In that exploratory study, satisfaction of consumer curiosity about organic food was not acknowledged by respondents as a

Table 1 Constructs, scale reliability, and measurement scales used.

Variable	Measurement items	Scale reliability	Measurement scale source
Level of involvement	To what extent do you agree or disagree with the following statements about organic food in general? *Please choose along the scale provided:* — It is something that interests me. — I get bored when people talk to me about it. — It is only natural that people become interested in it. — It offers nothing more than conventional food in my opinion. — I do not pay attention to information about it in magazines, on TV, or in stores. — When I am with a friend, we seldom talk about it. (along a Strongly Disagree–Strongly Agree seven-point Likert scale)	.8	Adapted from the Personal Involvement Inventory scale (Zaichkowsky 1985), and the Enduring Involvement Index (Bloch et al., 1986)
Prior perceived product knowledge	Please indicate your opinion on each of the following statements about your knowledge of organic food, *by choosing along the scale provided:* — I would describe my familiarity with it as . . . [Unfamiliar–Familiar] — I understand enough about it to evaluate it. [Strongly Disagree–Strongly Agree] — I can rate my knowledge of it as... [High–Low] (along seven-point Likert scales)	0.9	Adapted from Alba and Hutchinson (1987)
Product usage level	About what % of your total *monthly* food shopping is organic? _____%	Single question	
Time orientation	Please indicate whether you agree or disagree with each of the following statements: — I do not like to plan too far in advance. — What one becomes in life is especially the result of chance.	0.7	Combined from existing scales: Bergadaà (1991), Usunier and Valette-Florence (1995)

(*Continued*)

Table 1 (Continued).

Variable	Measurement items	Scale reliability	Measurement scale source
	— I often think about the things I want to do in the future. — I think that one has little control over the events of one's life. (along a Strongly Disagree–Strongly Agree seven-point Likert scale)		
Temporal-based benefits sought	How *important* is each of the following benefits to you in consuming organic food? *Please choose along the scale provided:* — Enjoying the taste. — Benefiting from safer food. — Improving the future health of me/and my family. — Satisfying my curiosity. — Supporting environmental welfare. — Gaining a better long-term nutritional value. — Supporting animal welfare. (along a Not at all Important–Very Important seven-point Likert scale)	0.7	Developed for measuring consumer preference for temporally based organic food benefits, where high-end values correspond to future-based benefits, and low-end values correspond to present-based benefits
Education level	What is your educational background? a. High school or less b. College c. University – Undergraduate d. University – Postgraduate	NA	Borrowed from *Handbook of Marketing Scales* (Bearden & Netemeyer, 1999)
Income level	What is the approximate overall *yearly* income of your household? a. Under £3000 b. £4000–£10,000 c. £11,000–£25,000 d. £26,000–£40,000 e. £41,000–£60,000 f. £61,000+	NA	Borrowed from *Handbook of Marketing Scales* (Bearden & Netemeyer, 1999)

notable benefit, nor was the benefit of 'buying locally to support local communities', as it was not perceived by consumers as linked to organic food. The 'temporal-based benefits sought' scale demonstrated sufficient reliability and internal consistency, with a Cronbach's alpha of .7. After refining the other constructs' scales, coefficient alpha

estimates were calculated at .8 for level of product involvement, .9 for the prior product knowledge scale, and .7 for the time orientation scale, which are acceptable reliabilities (Nunnally, 1978).

The research hypotheses were subsequently tested. Specifically, correlation analysis was used to examine the significance and direction of the relationship for each of the independent factors advocated (involvement, perceived knowledge, product usage, income level, education level) in the hypotheses. Partial correlation was also used to re-examine the relationships in a joint correlation matrix for all variables, controlling for the possible confounding effect of gender. Following an examination of the individually proposed factors, a parsimonious model involving multiple factors is examined to assess its overall influence in predicting variance in temporally emphasised benefits sought in organic food consumption. Accordingly, multiple regression analysis was used to determine the potential of an overall model for predicting significant variance in the temporal-based benefits sought based on the supported variables. The research findings are presented next.

Analysis and findings

Providing context to the study are certain descriptive findings also established via the survey instrument. Table 2 provides a summary of the sample's characteristics. The sample exhibited a greater percentage of females than males, where gender bias was dealt with in the analysis by controlling for the influence of gender. Of those surveyed, the average social class of the respondents was self-reported as 'middle class'.

Preliminarily, it was specifically observed in the sample's responses that fresh produce (fruits and vegetables) leads the organic food product category as the typical entry point for tried organic foods, followed by eggs and then meat. As for the most frequently purchased organic foods, fresh produce also leads as the most frequently purchased, followed by eggs and then milk.

In testing the research hypotheses, the following findings were obtained:

Table 2 The sample's profile.

Research sample ($N = 325$)					
Age	Under 25: 4% ($n = 13$)	26–45: 33.5% ($n = 109$)	46–65: 48% ($n = 156$)	65+: 14.5% ($n = 47$)	
Gender	Male: 33.5% ($n = 108$)	Female: 66.5% ($n = 214$)			
Education level	High school or less: 23.9% ($n = 76$)	College: 23.6% ($n = 75$)	University – undergrad: 15.7% ($n = 50$)	University – postgrad: 36.8% ($n = 117$)	
Income level (gross annual, in thousands)	£10 or less: 10.2% ($n = 31$)	£11–25: 26.6% ($n = 81$)	£26–40: 30.2% ($n = 92$)	£41–60: 21.6% ($n = 66$)	£60+: 11.5% ($n = 35$)

Hypothesis H1 was *supported*. Examining the relationship between level of involvement and temporally emphasised benefits sought, a significant and positive correlation was obtained, with $r(323) = .512$, $p < .001$, representing a large effect size (Cohen, 1988). The findings therefore support the view that consumers who are highly involved with a high interest in organic food are more likely to prefer and seek its future-based benefits, whereas consumers with lower levels of involvement are more likely to prefer its present-based benefits.

Hypothesis H2 was *supported*. Investigating the relationship between perceived level of prior knowledge and temporally emphasised benefits sought, a significant and positive correlation was obtained, with $r(313) = .413$, $p < .001$, representing a medium to large effect size (Cohen, 1988). This finding supports the view that consumers with higher perceived prior knowledge of organic food are more likely to be motivated by pursuit of future-based benefits, whereas consumers with lower perceived prior product knowledge levels are more likely to seek its present-based benefits.

Hypothesis H3 was *supported*. Gauging product usage level as the percentage of organic food purchases in a consumer's monthly food purchases, the third hypothesis was tested. In examining the relationship between level of product usage and sought temporally emphasised benefits, the results indicate a significant and positive correlation, with $r(323) = .286$, $p < .001$, reflecting a medium effect size (Cohen, 1988). Findings, therefore, support the view that consumers with higher levels of organic food usage are more likely to be driven by pursuit of its future-based benefits, whereas consumers with lower usage levels are more likely to be motivated by its present-based benefits.

Hypothesis H4 was *supported*. Investigating the relationship between time orientation and temporally emphasised benefits sought, a significant and positive correlation was obtained, with $r(323) = .162$, $p = .003$, indicating a small effect size (Cohen, 1988). Accordingly, findings support the view that consumers who have a future orientation are more likely to seek predominantly the future-based benefits of organic food, whereas consumers who are more present-oriented are more likely to pursue principally its present-based benefits.

Hypothesis H5 was *not supported*. Using one-way analysis of variance (ANOVA), results did not confirm the hypothesis that consumers with varying income levels significantly differ in the temporal emphasis of benefits sought in consuming organic food, with $F(6, 298) = .456$, $p = .840$. Accordingly, findings indicate that income level may not be an antecedent of any specific temporally emphasised benefit orientation in the context of organic food consumption.

Hypothesis H6 was *not supported*. Using one-way ANOVA, results did not confirm the hypothesis that consumers at varying levels of education differ systematically in the temporal emphasis of benefits sought in consuming organic food, with $F(4, 313) = 1.985$, $p = .097$. Hence, in contrast to previous research findings that suggest either a significantly higher or lower influence, the present research suggests that level of education is not a significant antecedent of temporally emphasised benefits motivating consumers in an organic food purchase and consumption context.

The lack of support for H5 and H6 adds to the debate in the organic food literature in relation to whether demographic variables such as income level and education level should be included in a profiling of the organic consumer. In investigating their influence in this research vis-à-vis the profiling of benefits sought and pursued in

Table 3 Summary of research hypotheses and results – Corresponding coefficients of association/ANOVA (and *p*-values).

Antecedents of temporally emphasised benefits sought:			
Hypothesis		**Analysis results**	**Overall result**
Level of involvement	H1	$r = .512$ (.000)**	HS
Level of perceived prior knowledge	H2	$r = .413$ (.000)**	HS
Level of product usage	H3	$r = .286$ (.000)**	HS
Time orientation	H4	$r = .162$ (.003)**	HS
Income level	H5	$F = .456$ (.840)	NS
Education level	H6	$F = 1.985$ (.097)	NS

**$p < .05$. HS, hypothesis supported; NS, hypothesis not supported.

organic food consumption through a temporal lens, the two variables did not show significant influence.

Controlling for the influence of gender, results show minimal changes in the analysis results, where the significance of the independent variables remains overall unchanged. In addition, multiple regression analysis was used to evaluate the significance of the supported factors in explaining and potentially predicting changes in the temporal emphasis of benefits sought. The results were statistically significant at $F(4, 296) = 26.49$, $p < .001$, and $R^2 = .30$, where level of involvement and perceived prior knowledge of the product contribute most to the model, while level of product usage and time orientation were less significant. Thus, consumers' varying levels of involvement with organic food and their perceived prior knowledge of it are observed to be powerfully and systematically associated with a temporally emphasised benefit orientation in organic food consumption. A summary of the results is presented in Table 3.

Discussion

According to Nurse, Onozaka, and McFadden (2010), 'regardless of the significant attention and growth surrounding sustainable foods, there is still a demand for research investigating the intersection of economic and psychological factors that can aid in predicting and explaining consumer behaviour' (p. 1) In recent years, the upsurge in organic food sales has been accompanied by an increase in research about it. Nevertheless, studies on perceptions and buying habits of organic food remain inadequate and extendable (Beaudreault, 2009). As a credence product, organic food signifies an example of natural food innovations that evolved in the past decade to highlight the diversity of consumers, represented in their varying preferences and heterogeneous gains sought. Along these lines, this research investigated such consumer diversity in motivations and varying preferences for organic food benefits using a temporal lens.

By integrating literature on time in consumer research, perceived benefits, benefit segmentation, and organic food studies, this research develops and empirically tests a set of hypotheses as to how particular psychographic, social, behavioural, and demographic consumer characteristics can systematically influence consumer biases in temporally emphasised benefits pursued. With this, the study takes an original

temporal perspective that extends existing literature into a temporal categorisation of perceived and sought benefits within the context of organic food consumption and purchase. While there is strong support found for the influential roles of product category involvement, prior knowledge, and product usage on consumers' temporal benefit orientations, the results also indicate significant albeit somewhat weaker support for the role of time orientation itself on such temporal benefits orientations. Put differently, the former are more salient antecedents in explaining and predicting consumer preferences and drivers when addressing a time-centric dimension of benefits.

Findings hence indicate that consumers with higher level of involvement, more perceived prior knowledge of organic food, and a higher level of usage are likely to be prominently motivated and driven by pursuit of its future-based benefits in its purchase and consumption. Likewise, consumers who are less involved with the notion of eating organic, those who have less perceived prior knowledge, and those with lower levels of usage have a higher likelihood to be predominantly motivated and driven by pursuit of its present-based benefit, namely its perceive superior taste for UK consumers, in its purchase and consumption.

While the literature does not specifically address the relationship between level of involvement and specific product benefits perceived by consumers, Heslop (2006) posits that higher involvement relates to superordinate goals attained in consuming organic food, that is, better health, environmental welfare, safer food, and so on. These goals are classified in the current research as future-based benefits. Hence, the present research findings, demonstrating a significant and powerful influence of level of involvement on the temporal emphasis of benefits pursued in organic food, are consistent with the extant literature.

The results for the influence of prior perceived knowledge are also complementary to earlier research postulating that individuals with enthusiasm for intellectual development usually plan for future goals, pursuing greater but delayed rewards (Agarwal et al., 1983; Bergadaà, 1990). The role of time orientation is backed by how temporal frames influence consumer decision making, where an emphasis of cognitive time orientations can affect optimal actions and decisions across situations. Zimbardo and Boyd (1999) in empirically studying and measuring time perspectives posit that a cognitive temporal bias in individuals to the past, present, or future can become 'a dispositional style, or individual-differences variable, that is characteristic and predictive of how an individual will respond across a host of daily life choices' (p. 1273). The present research applies this view efficaciously, with future orientation relating to motivations to pursue future-based benefits of organic food, where the latter benefits include seeking safer food, comprising less sensation and linking to a reduced health risk. However, the results reflect a lower level of significance and influence of time orientation compared with level of involvement, prior knowledge, and product usage levels.

With product usage as a behavioural antecedent of temporally emphasised benefits sought in organic food consumption, the study relied on research suggesting that heavy users capitalise on product-specific knowledge by further increasing the usage level of a product (Hoch & Deighton, 1989), where they also have higher levels of interest. Thus greater product usage correlates with anticipated benefits derived from a build-up of gains over time, providing longer-term advantages. Thus, the current research emphasises how product usage and level of interest involvement play significant roles at the background of temporal emphasis of organic food sought

benefits, with higher levels of product usage associated with pursuit of future-based benefits.

The lack of support for the influence of income level and level of education might be attributed to the sample's characteristics. The average reported annual income level in the research sample was around £26,000–£40,000 (€31,230–€48,040), and descriptives also indicated that a larger number of respondents were educated at university level (both undergraduate and postgraduate) compared to the numbers of respondents with a college degree or a lower reported level of education. A wider diversity in the respondents' income levels and levels of education in future research may help explain and broaden the current research results.

However, the findings mirror extant mixed findings in the literature, which indicate controversies and contradictions concerning the roles of income level and educational level in consumer behaviour towards organic food (Chinnici et al., 2002; Davies et al., 1995; Jolly, 1991; Krissoff, 1998; Lockie, Lyons, Lawrence, & Mummery, 2002; O'Donovan & McCarthy, 2002). The findings for income level complement Goldman and Clancy's (1991) proposition of the absence of a relationship between consumer income level and frequency of organic food purchase. Moreover, the controversial influence of demographic factors versus psychographic, social, and behavioural consumer attributes, as is the case in the present study, is reinforced by Tregear and Ness's (2005) reflections on extant studies of ethical and environmentally responsible behaviour, including those of organic food purchasing, where they highlight that 'overall, attitudinal factors are often found to be better discriminators of behaviour than demographic' (p. 20).

Conclusion and implications

This study is significant because it provides a broader understanding and appreciation of some consumer characteristics as antecedents of consumer time-linked motivations in organic food consumption and purchase. It highlights that taking a simplistic view of organic consumers as a homogenous group seeking the same benefits with equal importance does not enable proper segmentation, targeting, and positioning efforts by food marketers. It advances a time-based benefit segmentation approach that can help marketers understand and appreciate better the organic food consumer market by addressing antecedent time-based benefits perceived and sought by consumers as the most imperative driver for consumption. Through a time-based categorisation of product benefits in terms of *when* in time they ensue and linking the latter with consumer-related factors widely studied in consumer research, the research thus extends original insights for marketing researchers, marketers, as well as consumer groups.

For marketing researchers, the research outcomes advocate a relatively limited role of time orientation in influencing preferences for temporally emphasised benefits. The empirical results highlight other individual factors as relatively more influential in explaining systematic variations in consumer dominating motivation by temporal-based benefits sought in a particular product type. In addition, as organic food was the product category utilised in this study, the research assists a better explanation of psychographic, social, and behavioural drivers backing its purchase, consumption, as well as possible adoption. The study assists in finding some answers to questions posed earlier towards a better understanding of organic food in terms of what specific

consumer sub-segments are looking for, who they are, and how to define and target them more efficiently. The research findings highlight two consumer sub-segments. Future-based organic food benefit seekers tend to be consumers who have a high level of involvement, more perceived prior knowledge of organic food, and higher usage level, and they are also more likely to be generally future-oriented individuals. On the other hand, present-based organic food benefit seekers tend to be consumers who are less involved with the organic food notion, have a lower level of prior knowledge of it, and a lower level of usage, where they are also more likely to be generally present-oriented individuals.

For marketers, this study clearly supports an innovative temporal perspective in understanding and pursuing motivational benefits which consumers search for and prefer in a product or service. Specifically, the research highlights the use of a *temporal-benefit* or *time-based benefit* segmentation strategy aiming at improved targeting of organic food consumers. It thereby supports managers in designing more appropriate marketing programs which can more effectively communicate to each target segment on the basis of temporal motivations driving behaviour. Accordingly, marketers may find it beneficial to segment consumers based on when in time the most salient benefit they pursue takes effect using antecedent attributes investigated in this research to understand who these consumers are. In addition, the research results provide an opportunity for organic food producers to recognise the importance that different consumers place on various organic food benefits based on key psychographic, social, and behavioural influences.

For marketing communication managers, the findings offer recommendations in that directing marketing communication messages which highlight the appropriate temporally emphasised benefits at the appropriate target market may be ultimately critical in order for marketing efforts to be successful. In other words, the current managerial model of selecting a range of marketing communication media for conveying rather plain and generic messages about organic food (e.g. 'Buy organic') are likely to be much less effective than marketing messages targeted to appeal to market segments differentiable by level of involvement, prior product knowledge, time orientation, and usage level by linking such consumer characteristics to temporally emphasised benefits sought.

For example, marketers can consider targeting a message that highlights the present benefits of eating organic food (e.g. 'Immediately satisfying taste' and 'Sit down to a great meal') at individuals who are less involved with organic food, have less perceived prior knowledge of it, and/or with lower usage levels, while messages emphasising the higher nutritional value, safer food, better health, and/or enhanced animal welfare (e.g. 'Gives you the long-term benefits of safer food', 'Supports animal welfare') associated with eating organic should be targeted at those who perceive being more knowledgeable about organic food, are more involved with its notion and trends, as well as at those who consume it more. Such messages can be communicated via proper communication channels that reach these two consumer subgroups based on their characteristic attributes. Thus, the research recommends a more informative and tailored marketing communication with consumers that considers the temporal dominance of their focal benefits perceived and sought from organic food.

As for consumers, identifying and understanding more explicitly their own potential cognitive and affective biases as reflected in preference for certain organic food benefits than others may aid an improved comprehension of drivers in eating organic, thus aligning their consumption patterns with their temporal orientations.

For example, a future-oriented individual in general may enjoy organic food more if he or she is interested in organic food, learns more about it, and consumes it more frequently or in more quantities because these behaviours will reinforce the preference for future-based benefits such as health betterment and improved nutrition. The research recommends a better education of consumers to understand their own consumption needs, attitudes, and actions, and the latest information about organic food notion and value. In doing so, marketers can gain consumer confidence and trust as they offer the segmented consumer groups truthful and constantly updated information that may help them make more informed decisions based on continued scientific discoveries in respect to its value.

Without a doubt, food-sector marketers will benefit from the findings of this research to the extent that their marketing communication efforts are tailored to produce a product–consumer characteristics–message–media harmony, aimed at successful reach and impact. As Yoon and Kim (2001) indicate, 'knowledge of the relative concentration of target markets in each medium, as well as knowledge of audience motives or preferences, will undeniably drive media planners to effective media strategies' (pp. 349–350). This research clearly suggests this is particularly important with credence products, such as organic food, which involve aspects of experience, since credence characteristics, by definition, are difficult or impossible to ascertain even after purchase.

Thus, for marketers who focus on more than just initiating a first trial in consumers by investing marketing efforts to stimulate continued purchase and adoption, marketing communication efforts become critical in terms of the right message in the right channel to the right consumer, based on the temporal-based benefit segmentation advanced in this research. For example, for a firm offering home-delivered organic food baskets, online content and direct mailings to regular subscribers emphasising the long-term benefits of environmental welfare and higher long-term nutritional value may find repeat buying behaviour is reinforced to a much greater extent in comparison to what is achievable with messages emphasising short-term benefits such as superior taste. Conversely, the latter message as opposed to the former may find far greater appeal among low-involvement supermarket shoppers considering quick end-of-aisle purchases just prior to grocery check-out.

Research limitations and future research

A limitation of this study lies in the application of its conceptual framework to one product category only, which is organic food, and where generally identified future-based benefits outnumber perceived present-based gains. The results may therefore vary when applied to a service or to another product category, where an expected variability in the relative balance of temporal benefits is expected and also where other consumer characteristics or antecedent factors may be more significant in explaining and predicting variance in consumer pursued time-based benefits. Further, using a more varied sample of consumers – possibly including consumers who have strong doubts about organic food or are unlikely to consume it at all – may offer further insights.

The operationalisation of the study in the UK also does not necessarily enable findings to generalise to consumers in other countries. Given that the diffusion and bases for acceptance of organic food may differ geographically, research findings may

vary if this study is duplicated elsewhere. Accordingly, an initial exploratory study, as undertaken in the current study, can help highlight the organic food benefits generally perceived and acknowledged by consumers in the target country, where, for instance, present-based benefits such as satisfaction of curiosity and buying locally – benefits consumers did not deem relevant to organic food purchase in the UK – may ultimately be relevant for consumers in other countries or cultures.

A potential extension of the present research involves investigating the influence of seeking present-based value versus future-based value (taking the cost dimension of product valuation into account vs. pursued benefits) on the adoption decision process of organic food, moving beyond purchase decision making. This is given that a better comprehension of how temporally emphasised value sought affects steps and outcomes of the consumer adoption decision making process is integral to a consumer-focused approach to marketing efforts aimed at encouraging product category adoption.

Future research can also extend the study of antecedent factors to include other variables of relevance to the specific product category examined, such as influence susceptibility, lifestyle, age, presence of children in the household, among others, in addition to examining the possible influence of gender using a more gender-balanced sample. Also, cross-cultural comparisons of consumers can highlight differences among individuals' cultures and countries of origin in relation to the time-based benefits segmentation of organic food markets. Furthermore, an extension of the present study can investigate how categorised temporally emphasised benefits and associated values can influence consumers differently along the organic food adoption decision process in terms of its stages and subsequent decision outcomes.

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